Proceedings of LALSSWF '98

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1 Introduction

This is a report on and proceedings of the 4th Annual LAL SuperScalar Waffle Feed (LALSSWF '98) [3] held in Provo, Utah, on Friday, February 27, 1998. The venue was the Laboratory for Applied Logic (LAL), a graduate computer lab.

The annual event began three years ago as a bold experiment to apply techniques of modern microprocessor architecture to daily life. Through arduous research and sometimes acrimonious debate, we decided to experiment with applying the principles of superscalar and pipelined processing to making breakfast. Since then, the feed has come to be a landmark in the application of advanced scheduling and processing concepts to feeding starving graduate students, a defensible reason to put off dissertation work, and an asylum for atrocious puns.

2 This Year's Background

Category	Male	Female	Total
Professor	2	0	2
from Government	1	0	1
from Industry	1	1	2
Grad Student	3	3	6
earned Ph.D.	3	0	3
earned M.S.	7	4	11
baby	0	1	1
guide dog in training	1	0	1

Table 1: Demographics of Attendees

Although attendance was off some from last year, the feed still attracted some world-class gastronomes. Table 1 gives a statistical break-down of attendees. Neither the baby nor the guide dog contributed much, but they were at

¹Really, it was an excuse to get a graduate student to show up on her birthday.

least as well-behaved as everyone else. The professors contributed adequately, but they were well-behaved, too.

We applied practical insights² gained from previous years experience to get "improved execution load distribution techniques, improved batter prefetch techniques and some very tasty breakfasts." [2]

Due to limited resources³, we used commercially developed material. Multiple

(Figure at http://hissa.ncsl.nist.gov/~black/Papers/airProc98F1.gif)

Figure 1: Production Curve

waffle irons allowed superscalar production yielding greater throughput. Speedup is nearly linear, as shown in Figure 1. (The vertical units are milli-waffles per second.) Batter production, thermochemical reduction, and consumption were pipelined to reduce latency.

Just as a microprocessor needs ancillary blocks for bus interface, interrupt processing, virtual memory, etc. [1], the waffles were supported by eggs, sausage, and orange juice.

At one point production suffered a stall. We changed controllers and quickly resumed. Everybody left satisfied with the content of the event. Many declared it was one of the most fulfilling assemblages they had ever attended.

3 Papers and Panel Discussion

The review process for submissions was very demanding this year. In fact, no papers were found to be of adequate quality for presentation.⁴ There weren't even any puns worth mentioning.

The presence of a guide dog in training sparked a panel discussion of other possible dog training programs.

- 1. Proposal dog, to prepare those tedious and vacuous proposals.
- 2. Collect signatures dog, to track down people who are never in.
- 3. Reboot server dog, to go down to the machine room and restart the file server when it hangs.

²Don't plug too many waffle irons into the same circuit. Stagger the initial heat up to limit the amperes drawn. Otherwise the building super wonders why circuit breakers are blowing.

³We were too lazy to make batter from scratch.

⁴This may be due, in some small part, to the fact that no papers were submitted.

The last is similar to the recently-released loaddog software by Julian Assange (proff@suburbia.net).

4 Conclusions

Invite your secretary to such gustatory conclaves; it helps keep you on their good side. Begin early in the morning, since the aroma will permeate the building no matter what you do. Bring a large plastic bag to dispose of any inconvenient remains.

References

- [1] John L. Hennessy and David A. Patterson. Computer Architecture: A Quantitative Approach Morgan Kaufmann, 1990.
- [2] LAL Superscalar Waffle Feed '96. URL: http://lal.cs.byu.edu/people/jones/lalsswf/96feed.html (accessed: October 20, 1998).
- [3] Third Annual LALSSWF Call for Participation. URL: http://lal.cs.byu.edu/people/bunker/lal/98cfp.html (accessed: October 20, 1998).